

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A manually deformable input device responsive to manually applied pressure, comprising

a deformable resilient element configured to deform in response to said manually applied pressure, operatively coupled with

[an] electroconductive material [applied] configured to exhibit changes in conductance (resistance) in response to being stretched[;].

said electroconductive material operatively coupled to said deformable resilient element such that said electroconductive material is responsive to deformation experienced by said deformable resilient element, and

an electrical interface device configured to supply electrical current through said electroconductive material via a first terminal connected to said electroconductive material and a second terminal connected to said electroconductive material connected to said electroconductive material to establish a voltage gradient across said electroconductive material between said first terminal and said second terminal; wherein:

a third terminal is connected to said electroconductive material at an intermediate position along the electroconductive material, between the first terminal and the second terminal[;], and

said interface device is configured to receive a voltage from said third terminal.

2. (Original) An input device according to claim 1, wherein said electroconductive material is applied over said deformable resilient element.

3. (Original) An input device according to claim 1, wherein said electroconductive material is embedded within said deformable resilient element.

4. (Original) An input device according to claim 1, wherein said deformable resilient element is constructed from a foam or foam-like material, rubber or silicone rubber.

5. (Original) An input device according to claim 1, wherein said electroconductive material is a textile fabric.

6. (Original) An input device according to claim 5, wherein said textile fabric is a warp knit, a weft knit or a weave that includes conductive fibres.

7. (Original) An input device according to claim 1, wherein said electroconductive material is an elastomeric material having electroconductive components therein.

8. (Original) An input device according to claim 1, wherein said deformable resilient element and said electroconductive material are provided by an elastomeric electroconductive textile.

9. (Original) An input device according to claim 1, wherein the conductance of said electroconductive material increases when said material is stretched.

10. (Original) An input device according to claim 1, wherein said interface device is configured to measure a divided voltage between said first terminal and said second terminal.

11. (Original) An input device according to claim 1, wherein said interface device is configured to produce an output signal.

12. (Original) An input device according to claim 11, wherein said output signal is used to:

- control a motor;
- provide an input command to a game;
- raise an alarm condition;
- raise a visual, aural or tactual effect response;
- control a cursor;
- navigate a menu.

13. (Original) An input device according to claim 1, configured to be responsive to translation, rotation, compression or indentation of said deformable resilient element.

14. (Original) An input device according to claim 1, comprising a frame.

15. (Original) An input device according to claim 1, comprising a gripping member.

16. (Original) An input device according to claim 1, further comprising a fourth terminal.

17. (Currently Amended) A method of detecting deformation of a deformable input device, said [input device] method comprising the steps of:

providing a deformable resilient element configured to deform in response to applied pressure, [operatively coupled with]

providing [an] electroconductive material configured to exhibit changes in conductance (resistance) in response to being stretched;

providing said electroconductive material operatively coupled to said deformable resilient element such that said electroconductive material is responsive to deformation experienced by said deformable resilient element,

providing a first electrical terminal connected to said electroconductive material,

providing a second electrical terminal connected to said electroconductive material,

providing a third electrical terminal connected to said electroconductive material[,] [said third terminal at a position] at an intermediate position along the electroconductive material, between said first terminal and said second terminal; [and]

providing an electrical interface device configured to supply electrical current through said electroconductive material via said first terminal and said second terminal[; said method comprising the steps of;], and configured to receive a voltage from said third terminal,

establishing a voltage gradient across said electroconductive material via said first terminal and said second terminal, and

measuring a voltage appearing at said third terminal.

18. (Cancelled)

19. (Cancelled)